



PROGRESS REPORT NO. 164

TO: Robert Tan, U.S. Environmental Protection Agency (EPA) – via Electronic mail
Kathryn Cerise, EPA – via Electronic mail

FROM: Kris McCaig, Teck American Incorporated (TAI)

Cc: Denise Mills, TAI – via Electronic mail
Rob Orr, TAI – via Electronic mail

DATE: March 10, 2020

FILE NO: 01-773180-000

RE: Upper Columbia River (UCR) Remedial Investigation/Feasibility Study
(RI/FS) - Progress Report No. 164 Month Ending February 2020

Pursuant to Paragraph 39 of the June 2, 2006 Settlement Agreement (Agreement), the following is intended to provide a summary of activities completed during the past month in compliance with the aforementioned Agreement. It is also intended to provide a brief summary of pending and on-going activities.

Soil Amendment Technology Evaluation Study (SATES) – TAI continued coordination with the SATES team and Kira Lynch, Superfund Technology Liaison with the Office of Research and Development, Office of Science and Policy (and Acting Chief, Site Cleanup Section #2, Remedial Cleanup Branch) during the month. The Ohio State University (OSU) laboratory continued the bench-scale testing of the selected soil amendments through February 2020. The bench tests are being conducted in accordance with the Final Phase II Bench-Scale Treatability Testing Work Plan (May 2019) and Addendum No. 1 (July 2019). Analytical results for baseline samples (time point zero) and time point 1 (collected in October 2019) are under review by a third-party data validator. Time point 2 samples were collected on January 11, 2020 and analysis is in progress. The final set of samples are scheduled to be collected on March 11, 2020, at time point 3. TAI and Ramboll continued work on a method for deciding which amendments should be advanced to the Phase III field-scale pilot testing, and are preparing the draft Phase III/Phase IV work plan.

Baseline Ecological Risk Assessment:

Soil Toxicity Reference Values (TRVs) – TAI received approval from EPA via electronic mail on February 11, 2020, to finalize the “Technical Memorandum for Soil Screening Levels for Plants and Invertebrates for the Baseline Ecological Risk

Assessment” submitted to EPA via electronic mail on January 29, 2020. The final version of the Technical Memorandum was provided to EPA via electronic mail on February 11, 2020.

Weight of evidence (WOE) – TAI hosted a webinar with EPA on February 5, 2020 to review a strawman proposal weighting scheme TAI provided to EPA on January 31, 2020. TAI and EPA had a follow-up call on February 12, 2020 to discuss this further. On February 21, 2020, TAI received an email from EPA providing an example of how EPA envisions evidence will be integrated into a line of evidence. TAI and EPA discussed a potential workshop to continue work on WOE.

Upland Soil Background Assessment – TAI received an electronic mail message from EPA on February 13, 2020 in response to TAI’s request for clarification of two EPA comments (received on January 27, 2020), on the Draft Final Technical Memorandum, Assessment of Background Concentrations of Metals and Metalloids in Upland Soils, dated September 19, 2019. TAI and EPA discussed these responses on a conference call on February 13, 2020, and EPA subsequently provided amended comments on the technical memorandum to TAI on February 25, 2020.

Phase 3 Sediment Study Sediment Facies Mapping – TAI submitted the draft data summary report and the draft technical memorandum with sediment composition and facies maps for the river reaches outside the Phase 3 areas of interest (AOIs) on December 17, 2019. TAI is awaiting comments from EPA on both documents.

Use of Biotic Ligand Models – On February 21, 2020, EPA sent a letter to inform TAI of the EPA’s decisions regarding possible use of biotic ligand models for both single metals and multiple metals in the baseline ecological risk assessment for the UCR Site. TAI is reviewing and evaluating the letter.

2019 Phase 3 Sediment Study:

Backscatter Electron Microscopy (BSEM) – TAI submitted the revised BSEM sample selection technical memorandum and a response to comments on the draft memo via electronic mail to EPA on February 5, 2020. TAI received approval from EPA via electronic mail on February 21, 2020 to finalize the BSEM sample selection technical memorandum. TAI submitted the final memorandum to EPA on February 25, 2020.

Toxicity Identification Evaluation (TIE) Pilot Study – TAI submitted a response to EPA’s comments and a revised memorandum (“Additional TIE Pilot Study Testing – Revised”) to EPA via electronic mail on February 7, 2020. TAI received approval from EPA via electronic mail on February 18, 2020 to finalize the memorandum. TAI submitted the final study memorandum to EPA via electronic mail on February 19, 2020, and is proceeding with the additional testing as described in the memo.

Porewater Extraction Method Study – TAI received draft comments from EPA via electronic mail message on February 7, 2020 on the PowerPoint presentation materials

discussed on a conference call with EPA on January 28, 2020. EPA noted that “We look forward to reviewing the Pore Water Extraction Report that incorporates EPAs comments.” TAI began preparing the draft final report to include revisions to Stage 1 report in response to comments TAI received from EPA on November 20, 2019 and a new addendum to include results of the Stage 2 tests and response to EPA’s draft comments TAI received on February 7, 2020.

Quality Assurance Project Plan (QAPP) Change Request – TAI received comments from EPA on February 28, 2020 on the Phase 3 Sediment Study Draft QAPP Change Request No. 6, which TAI submitted for review on December 12, 2019.

Bioassay Sample Selection and Batching – TAI received comments from EPA via electronic mail on February 28, 2020 on the revised draft technical memorandum with bioassay sample selection and batching recommendations, dated January 31, 2020.

Bioassay Laboratory Preparation and Cross-training - During the month of February, TAI and EPA coordinated cross-training sessions to occur in March for personnel from the U.S. Geological Survey Columbia Environmental Research Center (CERC) and Pacific EcoRisk (PER) at each of the labs. At the time of writing, the in-person training was cancelled as agreed upon by TAI and EPA on March 2, 2020, and the training was held via video conference on March 3, 2020. A follow up call was held on March 6, 2020 and another call is scheduled for March 12, 2020.

Human Health Risk Assessment –TAI and EPA met in Spokane on February 6, 2020 to discuss TAI’s comments on the Draft Site-wide Human Health Risk Assessment (draft HHRA), submitted on January 15, 2020. On February 13, 2020, TAI submitted an addendum to its January 15, 2020 comments to provide additional information and context for certain comments, and TAI and EPA exchanged some publications discussed during the February 6 meeting. TAI received EPA’s responses to TAI’s comments on February 14, 2020 with descriptions of revisions that would be made to the draft HHRA before it is issued for public review.

Should you have any questions or require any additional information, please do not hesitate to contact me at 509-623-4501.